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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/677,976	10/02/2000	Michael E. Kafrissen	ORT-1316	7964

7590 08/25/2004

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EXAMINER	
CHOI, FRANK I	
ART UNIT	**PAPER NUMBER**
1616	

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/677,976	KAFRISSEN ET AL.	
	Examiner	Art Unit	
	Frank I Choi	1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *6/4/2004,4/5/2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *21-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *21-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4/5/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 21-23 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for reducing the risk of cervical dysplasia or cervical carcinoma, does not reasonably provide enablement for treatment or prevention of the same. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

The nature of the invention:

The invention is directed to a method of treating or preventing cervical dysplasia or carcinoma by administrating a pharmaceutical composition comprising an oral contraceptive for preventing pregnancy and folic acid for treating or preventing cervical dysplasia or carcinoma, wherein the subject is at higher risk of the same, the dysplasia or carcinoma is result of folic acid deficiency and is treatable or preventable by folic acid administration.

The state of the prior art and the predictability or lack thereof in the art:

The prior art of record is contradictory. However, at least one study has indicated that while folate deficiency may be involved as a cocarcinogen during the initiation of cervical dysplasia, folic acid supplements do not alter to course of established disease. See Butterworth et al., American Journal of Obstetrics and Gynecology, Vol. 166, No. 3, pp. 803-809 (1992). As such, predictability in the art appears to be low.

The amount of direction or guidance present and the presence or absence of working examples:

Although the Specification provides dosages, there is no showing or examples that combining folic acid with the contraceptive in a pharmaceutical dosage treats or prevents cervical carcinoma or dysplasia. In fact, the Specification indicates that folic acid has no therapeutic effect against cervical dysplasia (Specification, Pg. 4).

The breadth of the claims and the quantity of experimentation needed:

The breadth of the claims is broad in scope as the invention is directed to both treatment and prevention of cervical dysplasia or carcinoma. As such, in light of the above, one of ordinary skill in the art would be required to do undue experimentation in order to use the invention commensurate in scope with the claims, i.e. to determine whether the combination of folic acid with the contraceptive will treat or prevent cervical dysplasia or carcinoma.

Examiner has duly considered Applicant's arguments but deems them unpersuasive.

Applicant indicates that the claims have been amended to overcome the rejection, however, subparagraph (iii) still recites "treatable or preventable" in relation to cervical dysplasis and cervical carcinoma. As such, the rejection is maintained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wood et al. in view of Jackson (US Pat. 5,654,011) for the reasons of record set forth in the prior Office Actions in further view of Bamji et al. (Abstract) and US Pat. 5,254,572 (Serfontein) and the further reasons below.

Wood et al. and Jackson cited for the same reasons as set forth in the prior Office Action and the same are incorporated herein. Examiner notes that although the previous Examiner indicated that Jackson disclosed treatment of cervical dysplasia, Jackson actually states that folic acid supplementation reduces the risk of cervical dysplasia (Jackson, Column 5, lines 21-27, Column 6, lines 6-13).

Bamji et al. discloses that in view of the high prevalence of vitamin deficiency, including folic acid deficiency and vitamin B6, the delivery system for oral contraceptive can be effectively used for giving vitamin supplements as well.

Serfontain discloses the use of oral contraceptives can result in vitamin B6 deficiency and that the vitamin B6 can be supplemented by the combination of vitamin B6 and oral contraceptive in a single dosage form (Column 19, Column 20, lines 1-40).

Examiner has duly considered Applicant's arguments but deems them unpersuasive.

Applicant acknowledges that oral contraceptives interfere with folic acid absorption and that women with decreased levels of folic acid are subject to increased risk for cervical dysplasia and cervical cancer. It is also disclosed by the prior art that Vitamin B6 deficiency is also caused by oral contraceptive use and that Vitamin B6 can be supplemented by adding Vitamin B6 to the same dosage form as the oral contracteptive. Logically, one of ordinary skill in the art would be motivated to supplement folic acid intake concurrently with oral contraceptive intake in order to

reduce the risk of cervical dysplasia and cervical cancer due to the oral contraceptive effect on folic acid absorption. Further, instead of having to take and remember to take two separate pills, one for contraception and one for folic acid supplementation, it would be more convenient for the patient to have both folic acid and the contraceptive in a single pill. The combination of different active components in a single composition is hardly a novel concept (See Jackson, Bamji et al. and Serfontain). Bamji et al. and Serfontain disclose or suggest the combination of vitamins, which include folic acid, and oral contraceptive in a single dosage form. As such, for the reasons above, one of ordinary skill in the art would have been motivated to combine in a single pharmaceutical composition both folic acid and the oral contraceptive. The rationale to modify or combine the prior art does not have to be expressly stated in the prior art; the rationale may be expressly or impliedly contained in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law. In re Fine, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 21 USPQ2d 1941 (Fed. Cir. 1992). As such, contrary to Applicant's arguments, the prior art does disclose or suggest that vitamin deficiencies caused by oral conceptive use or present in persons taking oral contraceptives can be treated by combining the vitamin and oral contraceptive in a single dosage form. A such one of ordinary skill in the art would have been motivated to combine the folic acid and oral contraceptive in a single dosage form for reducing the risk of cervical cancer or dysplasia.

Conclusion

A facsimile center has been established in Technology Center 1600. The hours of operation are Monday through Friday, 8:45 AM to 4:45 PM. The telecopier number for accessing the facsimile machine is (703) 872-9306.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Choi whose telephone number is (571)272-0610. Examiner maintains a flexible schedule. However, Examiner may generally be reached Monday-Friday, 8:00 am – 5:30 pm (EST), except the first Friday of the each biweek which is Examiner's normally scheduled day off.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Mr. Gary Kunz, can be reached at 571-272-0887. Additionally, Technology Center 1600's Receptionist and Customer Service can be reached at (571) 272-1600.

FIC

August 23, 2004

S. MARK CLARDY
PATENT EXAMINER
GROUP 1200
1616